

## SEQUENCE LISTING

<110> Takeda Chemical Industries, Ltd.

<120> Novel Screening Method

<130> 3067W00P

<150> JP 2002-173798

<151> 2002-06-14

<150> JP 2002-205470

<151> 2002-07-15

<160> 24

<210> 1

<211> 351

<212> PRT

<213> Human

<400> 1

Met Glu Thr Asn Phe Ser Thr Pro Leu Asn Glu Tyr Glu Glu Val Ser

5

10

15

Tyr Glu Ser Ala Gly Tyr Thr Val Leu Arg Ile Leu Pro Leu Val Val

20

25

30

Leu Gly Val Thr Phe Val Leu Gly Val Leu Gly Asn Gly Leu Val Ile

35

40

45

Trp Val Ala Gly Phe Arg Met Thr Arg Thr Val Thr Thr Ile Cys Tyr

50

55

60

Leu Asn Leu Ala Leu Ala Asp Phe Ser Phe Thr Ala Thr Leu Pro Phe

65

70

75

80

Leu Ile Val Ser Met Ala Met Gly Glu Lys Trp Pro Phe Gly Trp Phe

85

90

95

Leu Cys Lys Leu Ile His Ile Val Val Asp Ile Asn Leu Phe Gly Ser

100

105

110

Val Phe Leu Ile Gly Phe Ile Ala Leu Asp Arg Cys Ile Cys Val Leu			
115	120	125	
His Pro Val Trp Ala Gln Asn His Arg Thr Val Ser Leu Ala Met Lys			
130	135	140	
Val Ile Val Gly Pro Trp Ile Leu Ala Leu Val Leu Thr Leu Pro Val			
145	150	155	160
Phe Leu Phe Leu Thr Thr Val Thr Ile Pro Asn Gly Asp Thr Tyr Cys			
165	170	175	
Thr Phe Asn Phe Ala Ser Trp Gly Gly Thr Pro Glu Glu Arg Leu Lys			
180	185	190	
Val Ala Ile Thr Met Leu Thr Ala Arg Gly Ile Ile Arg Phe Val Ile			
195	200	205	
Gly Phe Ser Leu Pro Met Ser Ile Val Ala Ile Cys Tyr Gly Leu Ile			
210	215	220	
Ala Ala Lys Ile His Lys Lys Gly Met Ile Lys Ser Ser Arg Pro Leu			
225	230	235	240
Arg Val Leu Thr Ala Val Val Ala Ser Phe Phe Ile Cys Trp Phe Pro			
245	250	255	
Phe Gln Leu Val Ala Leu Leu Gly Thr Val Trp Leu Lys Glu Met Leu			
260	265	270	
Phe Tyr Gly Lys Tyr Lys Ile Ile Asp Ile Leu Val Asn Pro Thr Ser			
275	280	285	
Ser Leu Ala Phe Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Val Phe			
290	295	300	
Val Gly Gln Asp Phe Arg Glu Arg Leu Ile His Ser Leu Pro Thr Ser			
305	310	315	320
Leu Glu Arg Ala Leu Ser Glu Asp Ser Ala Pro Thr Asn Asp Thr Ala			
325	330	335	

Ala Asn Ser Ala Ser Pro Pro Ala Glu Thr Glu Leu Gln Ala Met

340

345

350

<210> 2

<211> 1053

<212> DNA

<213> Human

<400> 2

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<210> 3

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<213> Human

<400> 3

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Asp Leu Pro Val Lys Arg Arg Ala

20 24

<210> 4

<211> 24

<212> PRT

<213> Human

<400> 4

Met Ala Pro Arg Gly Phe Ser Cys Leu Leu Leu Leu Thr Gly Glu Ile

1 5 10 15

Asp Leu Pro Val Lys Arg Arg Ala

20 24

<210> 5

<211> 24

<212> PRT

<213> Human

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1 5 10 15

Asp Leu Pro Val Lys Arg Arg Thr

20

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<212> PRT

<213> Human

&lt;400&gt; 6

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1 5 10 15

Asp Leu Pro Val Lys

20 21

&lt;210&gt; 7

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Rat

&lt;400&gt; 7

Met Ala Lys Arg Gly Phe Asn Cys Leu Leu Leu Ser Ile Ser Glu Ile

5 10 15

Asp Leu Pro Val Lys Arg Leu Glu Ser Pro Asn Lys Thr Arg Arg Pro

20 25 30

Tyr Gly Ala Ser Ile Tyr

35 38

&lt;210&gt; 8

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Rat

&lt;400&gt; 8

Met Ala Lys Arg Gly Phe Asn Cys Leu Leu Leu Ser Ile Ser Glu Ile

5 10 15

Asp Leu Pro Val Lys Arg Leu Glu

20 24

&lt;210&gt; 9

&lt;211&gt; 21

&lt;212&gt; PRT

<213> Rat

<400> 9

Met Ala Lys Arg Gly Phe Asn Cys Leu Leu Leu Ser Ile Ser Glu Ile  
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 Asp Leu Pro Val Lys  
                           20  21

<210> 10

<211> 351

<212> PRT

<213> Rat

<400> 10

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 Tyr Asp Ser Thr Ile Ser Arg Val Leu Trp Ile Leu Thr Met Val Val  
                           20                          25                          30  
 Leu Ser Ile Thr Phe Val Leu Gly Val Leu Gly Asn Gly Leu Val Ile  
                           35                          40                          45  
 Trp Val Ala Gly Phe Arg Met Val His Thr Val Thr Thr Thr Cys Phe  
                           50                          55                          60  
 Leu Asn Leu Ala Leu Ala Asp Phe Ser Phe Thr Val Thr Leu Pro Phe  
                           65                          70                          75                          80  
 Phe Val Ile Ser Ile Ala Met Lys Glu Lys Trp Pro Phe Gly Trp Phe  
                           85                          90                          95  
 Leu Cys Lys Leu Val His Ile Val Val Asp Ile Asn Leu Phe Gly Ser  
                           100                          105                          110  
 Val Phe Leu Ile Ala Leu Ile Ala Leu Asp Arg Cys Ile Cys Val Leu  
                           115                          120                          125  
 His Pro Val Trp Ala Gln Asn His Arg Thr Val Ser Leu Ala Arg Lys

130	135	140	
Val Val Val Gly Pro Trp Ile Leu Ala Leu Ile Leu Thr Leu Pro Ile			
145	150	155	160
Phe Ile Phe Met Thr Thr Val Arg Ile Pro Gly Gly Asn Val Tyr Cys			
	165	170	175
Thr Phe Asn Phe Ala Ser Trp Gly Asn Thr Ala Glu Glu Leu Leu Asn			
	180	185	190
Ile Ala Asn Thr Phe Val Thr Val Arg Gly Ser Ile Arg Phe Ile Ile			
	195	200	205
Gly Phe Ile Met Pro Met Ser Ile Val Ala Ile Cys Tyr Gly Leu Ile			
210	215	220	
Ala Val Lys Ile His Arg Arg Ala Leu Val Asn Ser Ser Arg Pro Leu			
225	230	235	240
Arg Val Leu Thr Ala Val Val Ala Ser Phe Phe Ile Cys Trp Phe Pro			
	245	250	255
Phe Gln Leu Val Ala Leu Leu Gly Thr Ile Trp Phe Lys Glu Ser Leu			
	260	265	270
Phe Ser Gly Arg Tyr Lys Ile Leu Asp Met Trp Val His Pro Thr Ser			
	275	280	285
Ser Leu Ala Tyr Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Ala Phe			
290	295	300	
Met Gly Gln Asp Phe His Glu Arg Leu Ile His Ser Leu Pro Ser Ser			
305	310	315	320
Leu Glu Arg Ala Leu Ser Glu Asp Ser Gly Gln Thr Ser Asp Thr Gly			
	325	330	335
Ile Ser Ser Ala Leu Pro Pro Val Asn Ile Asp Ile Lys Ala Ile			
	340	345	350

&lt;210&gt; 11

&lt;211&gt; 1053

&lt;212&gt; DNA

&lt;213&gt; Rat

&lt;400&gt; 11

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&lt;210&gt; 12

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; Mouse

&lt;400&gt; 12

Met Glu Ser Asn Tyr Ser Ile His Leu Asn Gly Ser Glu Val Val Val



	5		10		15										
Tyr	Asp	Ser	Thr	Ile	Ser	Arg	Val	Leu	Trp	Ile	Leu	Ser	Met	Val	Val
	20							25					30		
Val	Ser	Ile	Thr	Phe	Phe	Leu	Gly	Val	Leu	Gly	Asn	Gly	Leu	Val	Ile
	35							40					45		
Trp	Val	Ala	Gly	Phe	Arg	Met	Pro	His	Thr	Val	Thr	Thr	Ile	Trp	Tyr
	50							55					60		
Leu	Asn	Leu	Ala	Leu	Ala	Asp	Phe	Ser	Phe	Thr	Ala	Thr	Leu	Pro	Phe
	65							70					75		80
Leu	Leu	Val	Glu	Met	Ala	Met	Lys	Glu	Lys	Trp	Pro	Phe	Gly	Trp	Phe
								85					90		95
Leu	Cys	Lys	Leu	Val	His	Ile	Val	Val	Asp	Val	Asn	Leu	Phe	Gly	Ser
								100					105		110
Val	Phe	Leu	Ile	Ala	Leu	Ile	Ala	Leu	Asp	Arg	Cys	Ile	Cys	Val	Leu
								115					120		125
His	Pro	Val	Trp	Ala	Gln	Asn	His	Arg	Thr	Val	Ser	Leu	Ala	Arg	Lys
								130					135		140
Val	Val	Val	Gly	Pro	Trp	Ile	Phe	Ala	Leu	Ile	Leu	Thr	Leu	Pro	Ile
								145					150		155
Phe	Ile	Phe	Leu	Thr	Thr	Val	Arg	Ile	Pro	Gly	Gly	Asp	Val	Tyr	Cys
								165					170		175
Thr	Phe	Asn	Phe	Gly	Ser	Trp	Ala	Gln	Thr	Asp	Glu	Glu	Lys	Leu	Asn
								180					185		190
Thr	Ala	Ile	Thr	Phe	Val	Thr	Thr	Arg	Gly	Ile	Ile	Arg	Phe	Leu	Ile
								195					200		205
Gly	Phe	Ser	Met	Pro	Met	Ser	Ile	Val	Ala	Val	Cys	Tyr	Gly	Leu	Ile
								210					215		220
Ala	Val	Lys	Ile	Asn	Arg	Arg	Asn	Leu	Val	Asn	Ser	Ser	Arg	Pro	Leu

225	230	235	240
Arg Val Leu Thr Ala Val Val Ala Ser Phe Phe Ile Cys Trp Phe Pro			
	245	250	255
Phe Gln Leu Val Ala Leu Leu Gly Thr Val Trp Phe Lys Glu Thr Leu			
	260	265	270
Leu Ser Gly Ser Tyr Lys Ile Leu Asp Met Phe Val Asn Pro Thr Ser			
	275	280	285
Ser Leu Ala Tyr Phe Asn Ser Cys Leu Asn Pro Met Leu Tyr Val Phe			
	290	295	300
Met Gly Gln Asp Phe Arg Glu Arg Phe Ile His Ser Leu Pro Tyr Ser			
305	310	315	320
Leu Glu Arg Ala Leu Ser Glu Asp Ser Gly Gln Thr Ser Asp Ser Ser			
	325	330	335
Thr Ser Ser Thr Ser Pro Pro Ala Asp Ile Glu Leu Lys Ala Pro			
	340	345	350

&lt;210&gt; 13

&lt;211&gt; 1053

&lt;212&gt; DNA

&lt;213&gt; Mouse

&lt;400&gt; 13

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<210> 14

<211> 353

<212> PRT

<213> Human

<400> 14

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      20              25              30
His Gly Val Thr Phe Val Phe Gly Val Leu Gly Asn Gly Leu Val Ile
      35              40              45
Trp Val Ala Gly Phe Arg Met Thr Arg Thr Val Asn Thr Ile Cys Tyr
      50              55              60
Leu Asn Leu Ala Leu Ala Asp Phe Ser Phe Ser Ala Ile Leu Pro Phe
      65              70              75              80
Arg Met Val Ser Val Ala Met Arg Glu Lys Trp Pro Phe Ala Ser Phe
      85              90              95
Leu Cys Lys Leu Val His Val Met Ile Asp Ile Asn Leu Phe Val Ser

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100	105	110
Val Tyr Leu Ile Thr Ile Ile Ala Leu Asp Arg Cys Ile Cys Val Leu		
115	120	125
His Pro Ala Trp Ala Gln Asn His Arg Thr Met Ser Leu Ala Lys Arg		
130	135	140
Val Met Thr Gly Leu Trp Ile Phe Thr Ile Val Leu Thr Leu Pro Asn		
145	150	155
Phe Ile Phe Trp Thr Thr Ile Ser Thr Thr Asn Gly Asp Thr Tyr Cys		
165	170	175
Ile Phe Asn Phe Ala Phe Trp Gly Asp Thr Ala Val Glu Arg Leu Asn		
180	185	190
Val Phe Ile Thr Met Ala Lys Val Phe Leu Ile Leu His Phe Ile Ile		
195	200	205
Gly Phe Thr Val Pro Met Ser Ile Ile Thr Val Cys Tyr Gly Ile Ile		
210	215	220
Ala Ala Lys Ile His Arg Asn His Met Ile Lys Ser Ser Arg Pro Leu		
225	230	235
Arg Val Phe Ala Ala Val Val Ala Ser Phe Phe Ile Cys Trp Phe Pro		
245	250	255
Tyr Glu Leu Ile Gly Ile Leu Met Ala Val Trp Leu Lys Glu Met Leu		
260	265	270
Leu Asn Gly Lys Tyr Lys Ile Ile Leu Val Leu Ile Asn Pro Thr Ser		
275	280	285
Ser Leu Ala Phe Phe Asn Ser Cys Leu Asn Pro Ile Leu Tyr Val Phe		
290	295	300
Met Gly Arg Asn Phe Gln Glu Arg Leu Ile Arg Ser Leu Pro Thr Ser		
305	310	315
Leu Glu Arg Ala Leu Thr Glu Val Pro Asp Ser Ala Gln Thr Ser Asn		

	325		330		335	
Thr	His	Thr	Thr	Ser	Ala	Ser
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Met

<210> 15

<211> 1059

<212> DNA

<213> Human

<400> 15

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<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 16

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<210> 17

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

<400> 17

ctttctagat catggggcct ttaactcaat gtc 33

<210> 18

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Primer

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<210> 19

<211> 27

<212> DNA

<213> Artificial Sequence

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<223> Primer

<400> 19

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<210> 20

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Primer

<400> 20

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<211> 43

<212> DNA

<213> Artificial Sequence

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<223> Primer

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<210> 23

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<210> 24

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<400> 24

Trp Lys Tyr Met Val Met

1

5